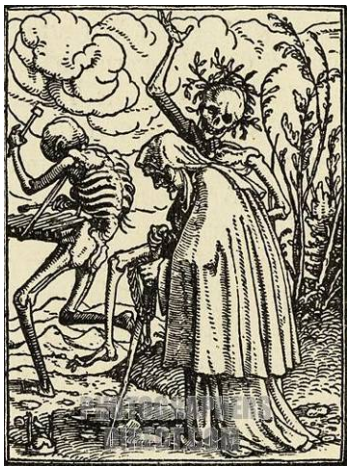
Using diverse sources of evidence for reconstructing the prehistory of musical exchanges in the Indian Ocean and their broader significance for cultural prehistory



[DRAFT FOR CIRCULATION AND COMMENT]

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ACRONYMS

BCE	Before Common Era
BP	Before present
Kya	‘000 years ago
ISEA	Island Southeast Asia
MSEA	Mainland Southeast Asia

ABSTRACT

Although the Indian Ocean has long been recognised as a fertile zone for cultural exchange, reflecting both trade routes and colonisation, it is only now coming into prominence in terms of its significance for the prehistory of the continents around its rim. It is now accepted that economic plants, animals, diseases, trade goods, languages, religion and cultural elements all moved around and across the Indian Ocean, often transforming the societies and environments into which they were introduced. The paper explores one specific aspect of cultural exchange, music and musical practice in the Indian Ocean. Case studies are used to assess the value and significance of different categories of evidence for the reconstruction of musical prehistory and the resultant chronostratigraphy. These include the history of two types of zither which occur on both sides of the Indian Ocean and which attest to the significance of geographical distributions of material culture. A related issue is the vexed question of the similarities of the xylophone in SE Asia and Africa, and role of morphology in resolving the historical direction of transfer. Slavery and the African diaspora in the Indian Ocean have only recently been the subject of in-depth scholarly examination and the paper summarises current literature and begins the process of categorising the exchange of musical subcultures. This throws into focus an important aspect of maritime transfers in the Indian Ocean; the low profile of some of the great trading nations, such as the Sassanians and the Chinese, in terms of cultural influence, despite their importance in overall trade.

1. Introduction

Although the Indian Ocean has long been recognised as a fertile zone for cultural exchange, reflecting both trade routes and colonisation (Vincent 1807), it is only now coming into prominence in terms of its significance for the prehistory of the continents around its rim. It is now accepted that economic plants, animals, diseases, trade goods, languages, religion and cultural elements all moved around and across the Indian Ocean, often transforming the societies and environments into which they were introduced (Blench 1994, 2010; Beaujard 2012). Understanding the which items are transferred and under what circumstances also helps reflect on the nature of contact and interaction.

Nonetheless, archaeological evidence for these transfers remains elusive; despite the clear evidence of the Malagasy language and genetics, no ceramics have ever been excavated that clearly demonstrate the Island SE Asia affinities of the population of Madagascar (Parker-Pearson et al. 2010). Maritime exchanges are of particular interest, since transfers cannot be the product of contiguous geography and imply a rather specific type of intentionality. Setting off across open water may have been driven by demographic expansion early in human history, but these motives have been supplanted in more recent eras by trade, religious proselytisation, military conquest, the quest for natural resources or slaves. All these activities have material correlates but only some leave their traces in the archaeological record. Developing an integrated prehistory to account for these lacunae is a task that has hardly begun.

The transfer of immaterial culture such as religion, artistic forms and social praxis is often easy to see, but harder to model. Reconstructing a narrative involves binding together very different classes of evidence and reaching conclusions with lower levels of certainty than can be expected from 'scientific' archaeology. Arguably though, these topics are of greater importance, since societies are not ceramics but nexuses of complex behaviour for which pottery may be a limited proxy. The more life that can be breathed into these reconstructions the richer will be our understanding of the past.

To illustrate this, the paper[1] explores one specific aspect of cultural exchange, music and musical practice in the Indian Ocean. This is a vast topic and must be approached selectively. Case studies are used to assess the value and significance of different categories of evidence for the reconstruction of musical prehistory and the resultant chronostratigraphy. These include the history of two types of zither attested across the Indian Ocean and the significance of geographical distributions of material culture. A related issue is the vexed question of the similarities of the xylophone in SE Asia and Africa, and role of morphology in resolving the historical direction of transfer. Slavery and the African diaspora in the Indian Ocean have only recently begun to stimulate in-depth scholarly examination and archaeology has yet to play much of a role in this topic, in marked contrast to the Atlantic slave trade. The paper summarises the recent literature and begins the process of categorising different musical subcultures. This throws into focus an important aspect of maritime transfers in the Indian Ocean; the low profile of some of the great trading nations, such as the Sassanians and the Chinese, in terms of cultural influence. This suggests the important role slavery may play; when the number of individuals transplanted across a maritime is sufficiently large, then cultural transfers may 'stick' and can survive long after the visible slave-descended community has been absorbed.

2. Methodological issues

Material culture, both ethnographic and archaeological, was formerly considered a key element in the reconstruction of prehistoric exchange and mutual cultural influence. This was particularly associated with a North European tradition of ethnology and remains reflected in museum collections. However, the study of synchronic material culture has almost vanished as an academic discipline, regrettably along with much of its subject matter. The reason appears to be primarily a lack of interest from anthropology, where the agenda has shifted markedly, but also weak interpretative frameworks. Ethnologists such as Bernard Ankermann,

[1] A first version of the parts of this paper were presented at a special workshop on Madagascar, held in the Musée Royale de l'Afrique Centrale, Tervuren in 2009. I would like to thank the organisers for inviting and for the audience discussion. Thanks also to Philippe Beaujard and Sander Adelaar for exchange of ideas over many years. Thanks also to the Kay Williamson Educational Foundation for supporting fieldwork. It is intended to complement a related review of the prehistory of music on the African mainland (Blench 2013).

Kurt Sachs and Sture Lagercrantz expended much time in categorising cultural traits into layers, complexes of traits supposedly found together. Thus a supposed 'Indonesian' layer whose influence could be detected in Africa and a Eurasian 'Steppe-hunting' layer responsible for much to the culture of North Eurasia and North America. Similarly, a supposed 'Oceanic' complex which may or may not have influenced South American culture (e.g. Nordenskiöld 1919-1931; Sachs 1928; Lagercrantz 1950). These debates now seem largely pointless because they were not founded on a significant awareness of either the processes or chronology of human settlement. Nonetheless, archaeologists have slowly begun to recognise the value that can be retained from such material culture studies. Rich accounts such as Speiser (1923) describing and mapping the material culture of Vanuatu has been republished in English, to make this study available again, and not for social anthropologists. Lagercrantz (1950), who contributed so much to the mapping of African material culture, had almost nothing to say about the logic of his manic accumulation of information. In addition, there is undoubtedly the issue of the more extreme diffusion represented by Elliot Smith (1911) and William Perry (1923[2]) whose globe-spanning pyramid builders did much to sabotage the credibility of more conventional ethnologists. Unfortunately, the Indian Ocean has not been immune from such speculation and where ethnic agendas drive the research this topic has been the subject of a certain amount of ill-informed speculation (e.g. Rashidi & Van Sertima 1987). New mathematical methods, notably including Bayesian network analysis, have recently been applied to material culture, usually in complete ignorance of their predecessors. However, any single-channel analytic methods are probably of less value than applying the whole arsenal of techniques now available.

Table 1 shows the categories that can be integrated in a study of the musical prehistory of the Indian Ocean and the relative abundance of evidence;

Table 1. Category and value of types of evidence

Category	Comment
Archaeology	Significant only when linked to iconography
Iconography	Highly significant in India and SE Asia
Synchronic ethnography	Of major importance in all regions
Artefact collections	Valuable but to be used with care
Written texts	Of some value in India and SE Asia

One of the methodological issues in material culture studies is the relevance of innovation. If two very similar artefacts are recorded in different geographic regions, then what is the likelihood that they are simply invented repeatedly as opposed to the two occurrences being connected? Our understanding of this is strongly dictated by fashion. Earlier writers tended to see much of the culture of Sub-Saharan Africa as flowing outwards from Egypt. The reaction to this was denying that anything came from Egypt and the two regions were effectively unconnected. Both positions are certainly extreme; there were clearly cultural flows between the two areas which can be picked apart by careful analysis. This topic has a long history in American cultural anthropology and Steward (1929) first attempted to construct an algorithm of the likelihood of innovation and Rands & Riley (1958) who consider the issue of discontinuous distribution.

Biological transfers are largely indisputable; we can know with some certainty that bananas, taro, water-yam and sweet potato were not domesticated within Africa and so must have been brought through human agency. Musical instruments have some of the same characteristics, partly because their morphology is largely arbitrary and dictated by culture, rather than subject to the evolutionary constraints of practical requirements. They are, moreover, a highly conservative category of material culture as they are not constrained by functionality in the same way as, for example, fish-traps. To this extent, they resemble zoogeography as a tool for analysis of prehistory. Musical instruments diffusing from one culture to another often retain names and performance styles of the source culture. Geographically bounded regions, such as islands, are often easier to unpick than a contiguous mainland area. Hence the importance of island biogeography for zoologists. As a consequence, musical cultures can create a chronostratigraphic map of

[2] The alternate title of this, Perry's magnum opus, *The Children of the Sun: A Study of the Egyptian Settlement of the Pacific*, perhaps tells us as much as we need to know about the credibility of his theories.

culture exchanges. An island such as Madagascar provides a palimpsest of the maritime nations which have influenced its cultural development. Musical instruments introduced from Island SE Asia (ISEA), India, the African mainland (including apparently pre-Bantu forager populations), Arabia and early Europe all remain in the ethnographic record.

To establish the background to Indian Ocean transfers, it is useful to set up a very approximate history of pathways. Table 2 is a list of the most well-recognised maritime traditions and their estimated starting date. Some of these are more controversial than others, and not all have had any recognised impact on musical traditions. It is not the intention to lay out the arguments for all of these, but rather to give sense of the chronological stratigraphy in relation to different transoceanic traditions.

Table 2. Maritime traditions and approximate chronology

Maritime tradition	Chronology
Initial settlement of Indian Ocean rim	Time disputed but perhaps from 125 kya
Early Assyrian/ Egyptian voyages	2000 BCE onwards
Navigation from South Asia	2000 BCE onwards?
Navigation from ISEA	Within ISEA from 4000 BP, but in Indian Ocean from ?2200 BP onwards
Graeco-Roman voyages	From 100 BCE?
China	From 200 AD
Sassanian voyages	From 200 AD
Arabian voyages	From 400 AD
Swahili coastal trade	From 700 AD
European voyages	From 1500 AD

A table such as this simplifies many uncertainties; some of these dates are poorly documented and little more than guesswork. Some important transfers took place in the absence of any clear evidence as to their context, for example, the early movement of key African crops to India (Blench 2003).

3. Two case-studies, the *valiha* idiochord tube-zither and the *zeze* stick-zither

Two types of zithers are found with a pan-Indian Ocean distribution (Blench 1984). One of the most distinctive musical instruments in the Indian Ocean region is the *valiha*, an idiochord tube-zither (Domenichini 1984; Razafindrakoto-Montoya 1997, 2006). Such zithers are typically made from a single internode of a broad-diameter bamboo, and the strings are formed from the raised epidermis of the bamboo. Small bridges at either end keep the strings taut and also act to tune them. Modern instruments have wire strings and even tuning pegs to make for increased durability, but these are recent innovations. The general principle is known widely across SE Asia, although more commonly involving instruments made from a half-tube of bamboo laid horizontally on a surface and struck with light beaters, as in Borneo and Sumatra. The player holds the instrument upright or horizontally outwards from the body, sometimes perched on a resonator, and plays it with two thumbs (Photo 1). The *valiha* is the national instrument of Madagascar, although the tubular form is only found in the highlands area and is strongly associated with the Merina people. The seventeenth century traveller Peter Mundy (1919) first described the instrument, which he saw in Madagascar in 1638. Instruments with a similar pedigree are also found in parts of island SE Asia, including Sulawesi, Maluku and

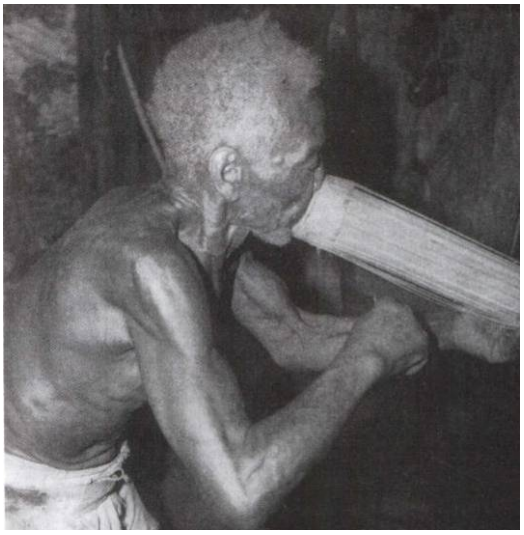
Photo 1. ***Valiha*** **with tin-can resonator**

Timor, but not Borneo (Sachs 1928; Kaudern 1927). Map 2 and Map 1 show the distribution of the hand-held tube-zither at the western and eastern ends of the Indian Ocean. The shading on the map of Madagascar shows the restricted highland distribution of the tube-zither. This instrument is unique to these two regions and does not occur elsewhere in the world[3].

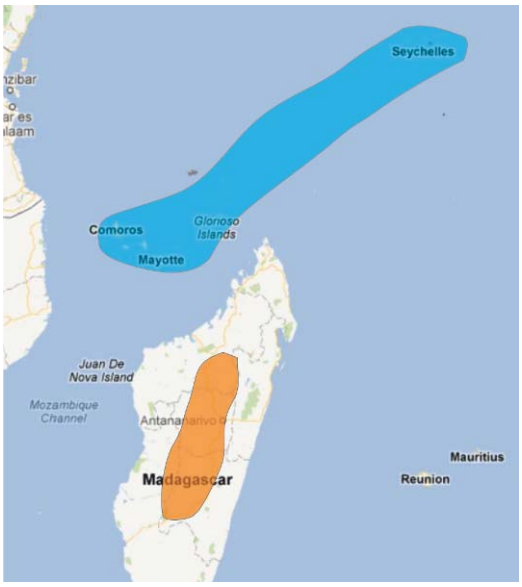
Map 1. Eastern distribution of the tube-zither

The classic explanation of the origin of the name *valiha* is Sanskrit *vādya* (वाद्य) a general term for a musical instrument (Sachs 1938). Adelaar (ined.) has proposed *balikan*, an Iban term for a stringed instrument, apparently an outmoded type of lute, in Borneo. Neither explanation is wholly convincing, as the instrument itself must originate in Sulawesi and islands further east, despite the general origin of the Malagasy in Borneo. This underlines the multi-ethnic character of the early trans-Indian Ocean migrations which populated Madagascar (Beaujard 2003). Although the tube-zither does not survive on the East African mainland, it must have been part of the instrumentarium of enslaved populations at one time, since it was carried to both the Comores (Ottenheimer 1970) and the Seychelles (Koechlin 2002). It underwent a remarkable transformation in the Seychelles where it survives as the *mulumba*, one of the disappearing *anciens instruments*, along with the chest-bow, still played by populations of African origin. Despite retaining the external appearance of a tube-zither, the *mulumba* is now used as an end-blown horn with simultaneously scraped strings (Photo 2). While retaining the organological character of the original Austronesian tube-zither, the players have functionally re-interpreted it, presumably through lack of contact with the performance tradition.

Photo 2. Seychellois *mulumba* trumpet



Map 2. Western distribution of the tube-zither



Map 3 shows a synthesis of information concerning the spread of the tube-zither. The type of instrument common to Sulawesi and Madagascar is not found in Borneo or the coastal areas of East Africa. It seems likely that it must have travelled with individuals direct from Sulawesi after the establishment of the route to East Africa. Even so, it is still likely that this was in ships with Malay captains, and

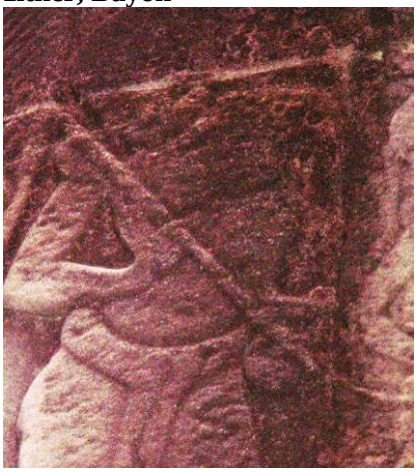
[3] Sachs (1927) also lists Guyana, the Malay Peninsula and the Balkans [!] but checking back to his references, the instruments are structurally quite different.

therefore a transit via Borneo and Sumatra. On becoming established in Madagascar, it then was adopted by the mixed Bantu/Austronesian populations who moved it first to the Comores and then on to the Seychelles.

Map 3. Spread of the tube-zither from Sulawesi

Another instrument which also persists in the Seychelles in transposed form is the stick-zither, which is only found around the rim of the Indian Ocean. A stick-zither is a flat bar with a fastening post at one end, with one or several strings stretched along its length. The string(s) pass along the top of the bar, attached to a hemispherical gourd or other resonator held against the player's chest. The bar may have projections beneath the strings so that as they are strummed the projections are used like frets to alter the pitch of the string (Jones 1971: 163). Alternatively, the player can stop the string with the pad of the fingers to bring out various harmonics. There are two types of stick-zither in SE Asia, those where the stick is a flat bar, and those where it is a round bar. The second type underlies such significant classical instruments as the South Indian *vina*. Map 4 shows the eastern distribution of the stick-zither. The yellow shading marks the flat-bar zither and the blue the round-bar.

Photo 3. Chest-resonated stick-zither, Bayon



Source: Author photo

Photo 4. Chest-resonated stick-zither at Borobodur

Source: Author photo

Map 4. Eastern distribution of the stick-zither

The stick-zither is first represented in India in the 7th century on the temple at Māmallapuram (Marcel-Dubois 1941:72; Kaufmann 1981: 180). In South Asia, it rapidly develops into instruments more closely resembling the modern *vina* with two gourd resonators and more strings (Coomaraswamy 1926, 1931; Chonpairot 1981; Wrazen 1986). However, simpler types survive as folk instruments, for example among the Sora (Bhattacharya 1999: 48). In this form it was carried to SE Asia via Indian voyages which may begin as early as the 2nd century BCE. The first clear evidence of its presence in ISEA is at the monument of Borobudur in Java (800-850 AD) where it is shown several times on the external friezes (Photo 4). For MSEA, the stick-zither is first shown on the Bayon within the Angkor complex (ca. 1050 AD) several times (Photo 3). Although there is nothing specifically Buddhist about this instrument, it may be significant that both these monuments are Buddhist in orientation and iconography.

The SE Asian distribution is intriguing, since it is disjunct, found in the mainland, and apparently transmitted via the Indianised states established from 200 BC onwards. It is still common in Vietnam and has been revived in Lan Na, modern Chiang Mai, in Thailand, where it was once a prestigious instrument (Photo 5). Known as *say*

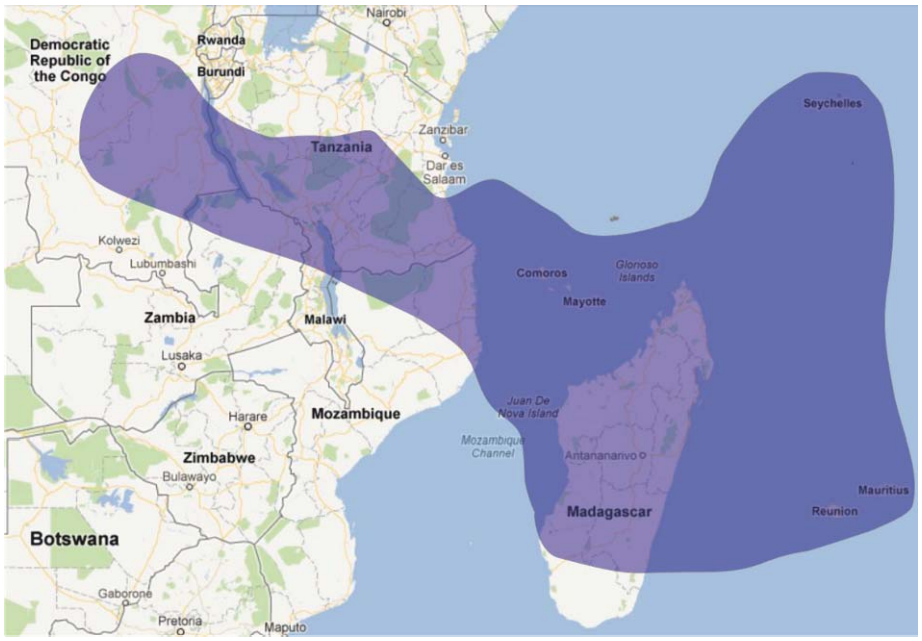
Photo 5. Lan Na stick-zither

Source: Author collection

Photo 6. Seychellois *zez* monochord zither

diev or *khse muoy*, it has virtually died out in modern Cambodia. The other area of distribution is in Sulawesi and Maluku. The ISEA distribution was first mapped by Kaudern (1927) for Sulawesi, but it occurs in Timor as well, although, like the plucked tube-zither, it is absent in Borneo. Since we know from iconography it was formerly played on Java, it was presumably introduced by the Indianised states, spread eastward with the inter-island trade networks and then disappeared in Java and other islands nearer the mainland.

Map 5. Western distribution of the flat-bar stick-zither



The flat-bar stick-zither was subsequently carried both to Madagascar and the East African coast from ISEA. Unlike the tube-zither, the stick-zither is widespread along the East African coast. Although it is also recorded inland towards the DRC, this expansion was apparently a consequence of the slave trade (Laurenty 1960; De Hen 1960). The stick-zither presumably spread among coastal populations in the period when a mixed Bantu/Austronesian trading community was settled on the coast (Blench 2010). Map 5 shows the western distribution of the flat bar stick-zither.

The origin of the Swahili name *jeje* is uncertain, but we can safely say that it is not a loan from Ancient Egyptian *dede*, as suggested by Sachs (1938:47). The prevalence of this instrument in the coastal communities among populations who were later enslaved has also led to its appearance in the Seychelles in reconfigured form (Koechlin 2002).

Photo 6 shows a Seychellois performer on the *zez* (cognate with *jeje*) which has somehow been hybridised with the chest-bow, also played on the coast. The structure and performance style is still that of the stick-zither but the appearance has been made to conform to the chest-bow. Précourt et al. (2010) illustrate the three-stringed *ndzendze* of Mayotte which maintains a highly conservative SE Asian appearance. The Malagasy name (*lokanga voatavo*) appears to be a later calque comparing it to the fiddle, suggesting it may have been introduced *from* the East African coast, rather than the other way around. Table 3 summarises the transfers and contexts of the stick-zither as reflected in the broader history of the region.

Table 3. Transfers of the stick-zither around the Indian Ocean

Develops in India at unknown date, both as a folk and later a classical instrument. First represented 7th century AD
Transfer to MSEA as part of formation of Indianised states
Carried to ISEA at the same time or later. Adopted in Java and probably elsewhere and spreads eastward to Sulawesi. Then disappears from Java.
Transfer to East Africa during the 'raiding and trading' period, 6-9th centuries
Transfer to Madagascar as part of Swahili coastal trading, 8th century onwards
Transfer to Indian Ocean islands following European slave trade, 16th century onwards
Transfer to interior Africa via the slave caravan routes, 18th century onwards

Because of its better iconographic record, we can be somewhat more precise about the movements of the stick-zither. Map 6 shows a synthesis of the probable transfers of the zither, with dates from the iconography. These do not necessarily represent its first appearance, but markers on its directions of travel.

Map 6. Spread of the stick-zither with approximate dates

4. Africa, Indonesia and controversy

One of the long-running controversies in the history of Indian Ocean transfers is the vexed question of xylophones and other musical influences as exemplars of Austronesian influence in Africa (Hornell 1934; Hutton 1936). Xylophones consist of wooden plaques of different lengths, arranged in order of size, and often supported in a frame and in some examples, resonators under individual keys. As long ago as 1936, the musicologist Jaap Kunst (1936) posited a connection between the musical cultures of Indonesia and 'Central Africa', based not only on instruments, but on the similarity of musical intervals, in particular the equiheptatonic scale. This argument was expanded by A.M. Jones (1964, 1971) who moved on from xylophones to a broader argument connecting even West Africa and Indonesia. Heins (1966) and Blench (1982) evaluated Jones' arguments and found them highly misleading, sometimes including a wilful misrepresentation of the evidence. Despite this, Jones' arguments live on in an even more extreme form, including claims that Indonesians were responsible for the construction of Great Zimbabwe (Dick-Read 2005).

Figure 1. Holbein's (1515) illustration of the xylophone

This is alternately amusing and annoying, but it should not be allowed to obscure the fact that, as the examples above illustrate, cultural and material transfers across the Indian Ocean were perfectly real. The example of the xylophone can be taken as a disputed case study. Prior to European colonisation, xylophones were known only from SE Asia and Africa. Although the marimba may seem highly characteristic of South-Central America, its introduction reflects the Atlantic slave trade (Chenoweth 1964; Armas Lara 1970), while the African origins of the European xylophone, *Strohfidel*, first noted in Europe in 1511 (Schlick 1511) and represented by Holbein in an engraving dated 1515 are still more evident (Figure 1).

The question is thus whether the two areas of distribution are an example of a transfer, and if so in which direction? It has been virtually taken for granted that the African occurrences reflected a 'high-culture/low-

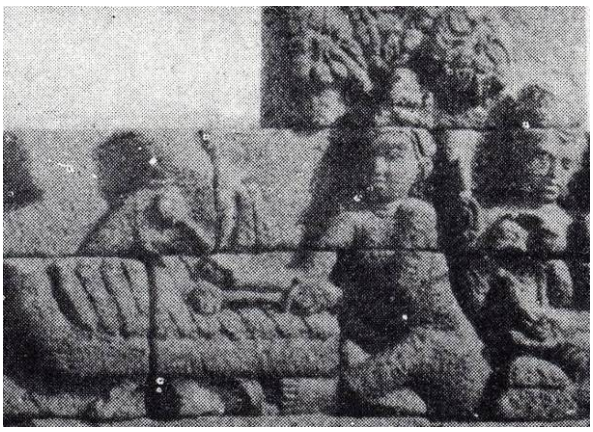
culture' transfer although there was no concrete evidence for this. In reality there is quite a strong case that the transfer was in the opposite direction, from Africa to ISEA. The difficulties with arise mainly from prejudices about 'high culture' rather than historical credibility. Attributing an African origin to the complex orchestras of pitched percussion instruments so much admired by Western composers runs counter to a series of unspoken assumptions.

Xylophones, and their cousins, the metallophones, are highly prominent in SE Asian culture today and indeed are taken as almost iconic of the region (Blench 2006). They now occur in Cambodia, Laos, Burma, Thailand, Malaysia, Indonesia and South China (Collaer 1992; Sam-Ang et al. 1998; Miller & Chonpairot 1981, 1994; Zhang Xingrong 1990, plate 22). In certain regions, notably Java, the xylophone evolved into a highly elaborate ensemble instrument (Kunst 1968). Kunst (1973, II:416-7) shows an image of a wooden xylophone at Borobudur (Photo 8). A significant element of the modern Javanese instrument is missing, however, the resonators under individual keys, which presumably developed later. In the intervening period between Borobudur and the first European descriptions, metallophones developed, and the large ensembles with the arrays of tuned gongs were formed. Although noted as early as the sixteenth century, the *gamelan* first made an impact on European culture when a Javanese group played at the Paris Exhibitions of 1889 and 1890 and was praised by Debussy[4] (Harpole 1986).

Photo 7. Thai *ranāt ēk* xylophone

Compared with Java, the evidence for mainland SE Asia has nothing like the same time-depth. Neither the Champa friezes nor the Bayon show xylophones (Blench in press). Morton (1976: xx and frontispiece) has researched representations of the xylophone in Thailand and notes that the earliest is an image of the wooden-keyed xylophone, *ranāt ēk*, in a manuscript dated ca. 1730 illustrating a *pi phat* ensemble. The painstaking unpicking of Thai musical history in Miller & Chonpairot (1981) points to a first appearance of the xylophone in the eighteenth century. Photo 7 shows a typical *ranāt ēk*. Similar xylophones are found in Cambodia and Laos and at the court of Trengganu in Malaysia. The Burmese xylophone, the *pat-talà*[5], is a 24-key trough-xylophone with suspended keys first described by Alexander Hamilton (1727:427). Xylophones do not appear on the paintings at Bagan, suggesting a late introduction. A SE Asian trough-xylophone[6], the *orgue de Barbarie*, apparently came into the possession of the composer Rameau, and he discussed its tuning in his *Guide de la musique pratique* (1760). The xylophone has been recorded from India, known under the names *kashtha tarang, bastran* and *taranga*, all apparently trough-resonated instruments on the Burmese model (Sachs 1915). The xylophone was played in China as part of the court ensembles of the Qing dynasty (1644-1911) but was regarded as a 'foreign', i.e. Burmese instrument (Thrasher 2000). This instrument, under the name *mokkin*, was introduced into Japan in the Edo period as part of the *minshingaku*, 'Ming and Qing dynasty music', and is still heard in the kabuki *geza* ensemble (Ferranti 2000:53). The xylophone in the Philippines is confined to the more southern islands and is manifestly borrowed from Indonesian traditions (Maceda 1998). Map 7 shows the approximate pre-European SE Asian

Photo 8. Trough-xylophone, Borobudur



Source: Kunst (1973)

[4] 'Javanese music obeys laws of counterpoint which make Palestrina seem like child's play.' Quoted in Smith (1977)
[5] Etymologically a Mon word meaning drum + coffin (Miller & Chonpairot 1994:59).
[6] To judge by the illustration in La Borde (1780)

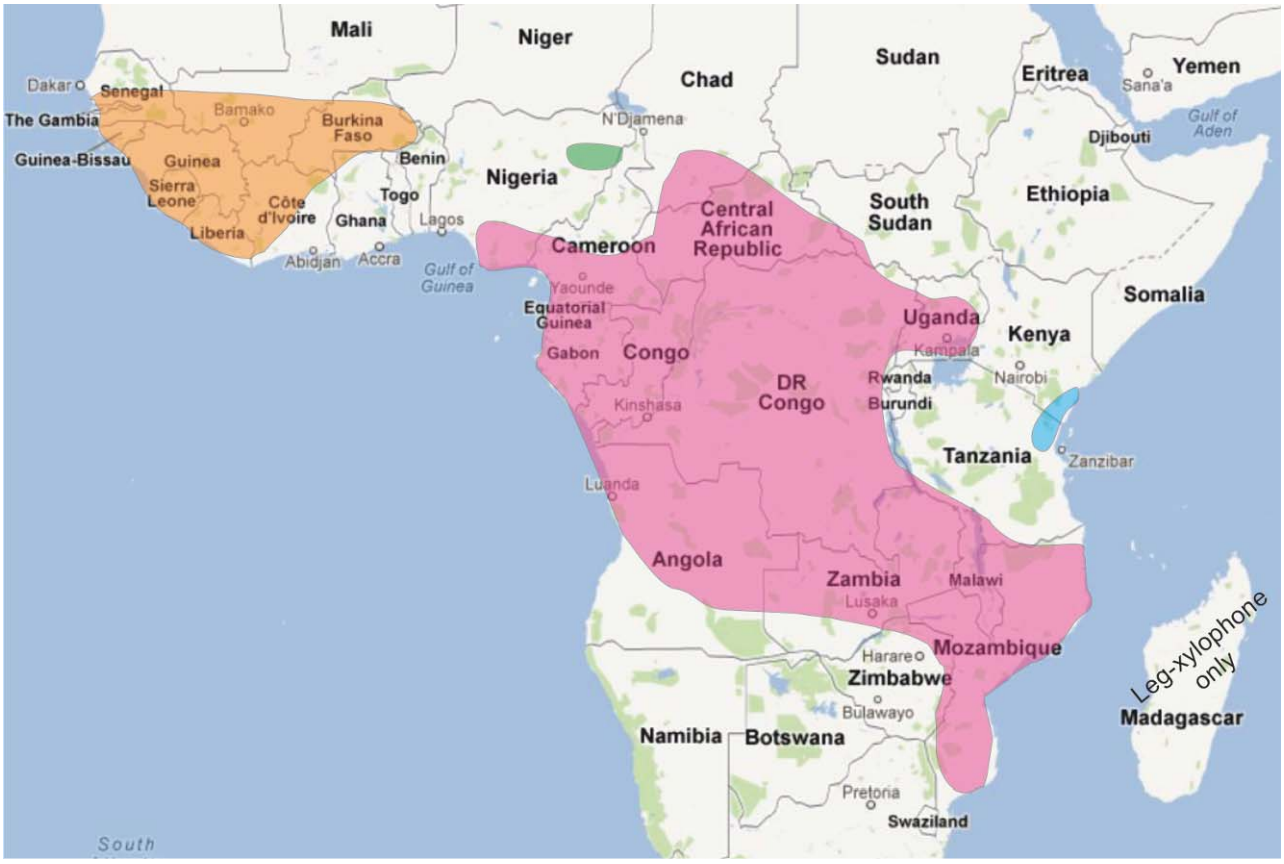
distribution of the xylophone. The larger blue area shows all frame-xylophones, the inner red area the distribution of xylophones with individually resonated keys. A map such as this inevitably smoothes out subtle ethnic mosaics; for example, on a large island such as Sumatra, not all populations play the xylophone. However, it suggests the broad pattern of distribution.

Map 7. Eastern distribution of the xylophone, trough and resonated key types

On the basis of existing evidence, it seems most likely that Java was the nucleus of the evolution of the frame-xylophone and that it spread northeast to the Southern Philippines, northwest to Sumatra and thence to mainland SE Asia, to Cambodia, Thailand and Myanmar. The spread of the instrument on the mainland may well be as late as the seventeenth or eighteenth centuries.

Frame-xylophones in Africa are a similarly iconic instrument and occur from Senegal to Southern Mozambique. The distinctive features of African frame-xylophones are the individual gourd-resonators under each key, and the 'buzzing membrane', a patch of spider-web placed across a hole in the gourd, to give the struck key a distinctive resonance. These are found across the range of the instrument, except for the small area in NE Nigeria where cowhorns replace gourds as resonators. Map 8 shows the pre-European African distribution of the frame-xylophone.

Map 8. African distribution of the frame-xylophone



There no archaeological evidence for the presence of the xylophone and representations by travellers only go back to the seventeenth century. However, a remarkable example of a musical instrument which may have been preserved over a long period is the Sosso Bala, a balafon [frame-xylophone], kept in the town of Niagassola in modern-day Guinea. It is said to be the original instrument referred to in an episode in the Mande Sundiata Epic, which would make it over 800 years old[7] (Blench 2013). Photo 9 shows a xylophone pictured in the *manoscritto Araldi* (about 1670) from near the mouth of the River Congo and Northern Angola, and, given the representational conventions of the period, generally reliable (for details of the manuscript and its recovery see Pistone 1969). Photo 10 shows performers on a rather larger instrument in central Angola, photographed in the 1930s.

Photo 9. Xylophone, gourd trumpet and harp from the manoscritto Araldi

The distribution of the African xylophone has been studied by Boone (1936), Jones (1971) and Anderson (1967, 2001). Without entering technical discussions, it is clear that instruments everywhere in the continent share numerous constructional features, related tuning systems, and playing techniques, including the 'interlocking' melodies generally characteristic of African music. A telling piece of evidence for the antiquity of the

[7] URL http://www.unesco.org/bpi/intangible_heritage/guinea.htm

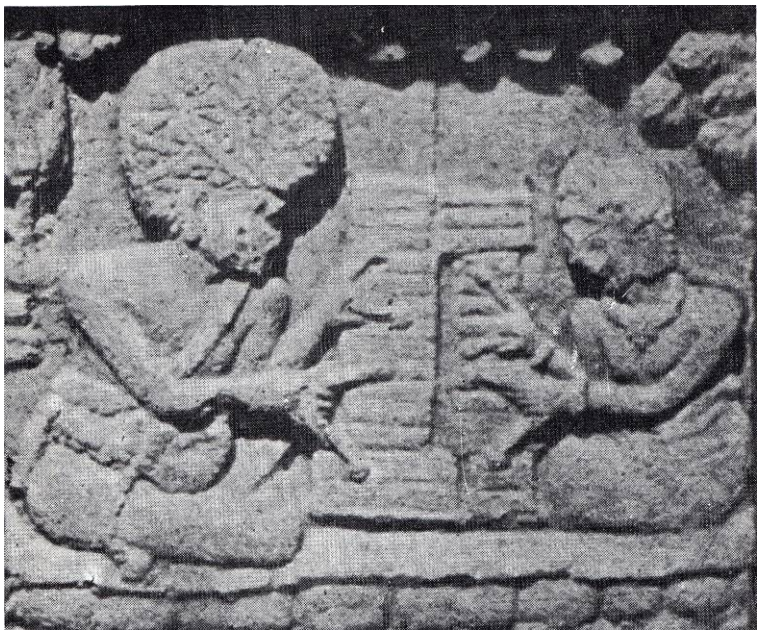
xylophone discussed in Blench (1982) is the presence within Africa of all the stages of its evolution, from simple struck bars, to resonated bars, leg-xylophones, pit-xylophones and frame-xylophones. This suggests a long history in the continent, and the evolution of the sophisticated instruments found today spread over millennia. Given our understanding of the chronology of ISEA contact with Africa, the idea that the xylophone 'spread' from SE Asia is almost impossible to model historically. As the patterns exhibited by the tube- and stick-zithers show, transfers from SE Asia seem to be confined to a restricted area of the East Coast.

Photo 10. Angolan gourd-resonated xylophone

As for a transfer in the opposite direction, as in a detective novel, there must be motive and opportunity for the African xylophone to be transported to island SE Asia. We know from Chinese sources that African slaves were carried to SE Asia from an early period, and that xylophones are played in the same regions as the probable source of the slaves. Most tellingly, the earliest iconographic representations of musical performance in SE Asia, those at Borobudur and My Son, do not show pitched percussion ensembles, but rather flutes, drums and string instruments. Similarly, no xylophones appear in the friezes at Angkor, despite the importance of the xylophone in the Cambodian classical orchestra today.

The lack of any clear-cut evidence for the antiquity of the xylophone in SE Asia points to a recent spread, almost certainly outwards from Java or other central islands of Indonesia. An intriguing piece of iconographic evidence points to the possibility that xylophones were introduced by African slaves. Kunst (1973, II) illustrates a frieze of the paired xylophones at the temple of Candi Penataran in Central Java (ca. 1375). The players are playing with forked sticks similar to those used in East Africa, and the arrangement of paired instruments facing one another is also a typical African practice. Even more striking, one of the player also has what can only be described as 'big hair', large bouffant hair arrangements (Photo 11). Kunst makes no comment on this, but it seems worth considering that these are representations of African performers teaching their Javanese counterparts. Although absolute proof of a transfer from Africa is unlikely to be forthcoming, it seems perfectly credible that such a transfer did take place and initiated a transformation of SE Asian regional musical culture.

Photo 11. Xylophone players at Candi Panataran



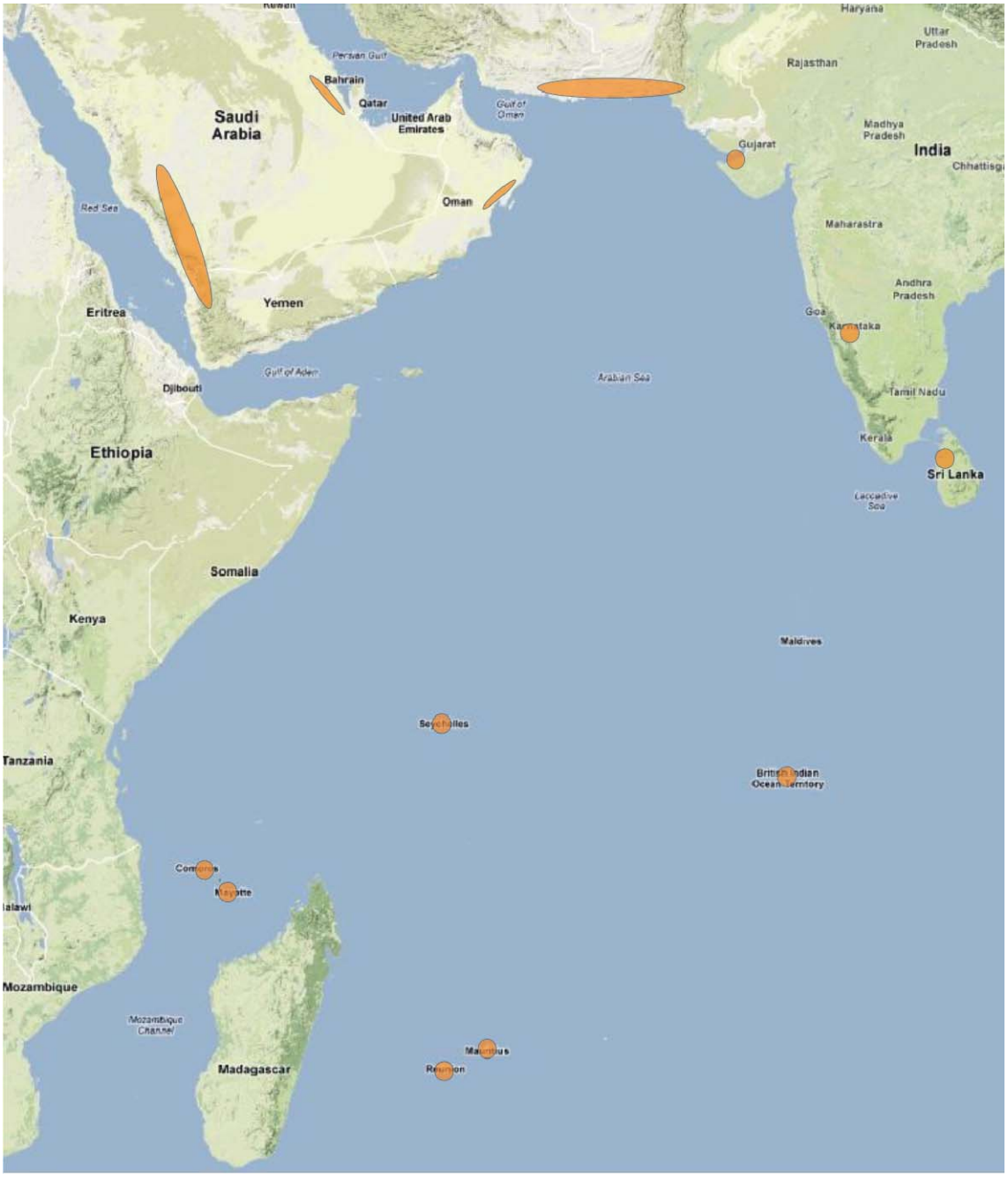
Source: Kunst (1937)

5. Music and the African diaspora in the Indian Ocean

The Atlantic slave trade, in the guise of diaspora studies, has received considerable attention from historians and archaeologists in recent decades. There is also a body of research on the Islamic trade across the Sahara, although much of this was in the 1960s and 1970s (Blench 2011). But until recently, the Indian Ocean trade had received almost no attention at all from scholars and certainly none from archaeologists. Yet it is almost certainly of greater antiquity than the other two and was conducted on a scale of equal magnitude (Collins

2006 estimates some twelve and a half million slaves were transported over two millennia). The reason for this curious lacuna is thus nothing to do with its historical importance and everything to do with 'voice', the stridency of communities in calling attention to their identity. Former slave communities are dispersed across a wide range of Asian countries and today speak a variety of languages. Moreover, records may be in languages not read by European scholars, while what is written about them frequently does not enter the Euro-American library system. However, a range of publications has begun to appear, focusing on historical topics (Harris 1971; Rashidi & Van Sertima 1987; Baptiste 1998; Segal 2001; Basu 1993, 2008a,c; Catlin-Jairazbhoy & Alpers 2004; Collins 2006; Mohamed 2006; Obeng 2007; Ray & Alpers 2007; Hawley 2008; Jayasuriya & Pankhurst 2003; Jayasuriya & Angenot 2008; Kessel 2007). Archaeology is almost completely ignored to date. Map 9 shows the approximate distribution of still-identifiable African diaspora communities around the Indian Ocean.

Map 9. African diaspora communities in the Indian Ocean



Indian Ocean diaspora community music has been studied by a variety of authors (Koechlin 2002; Badalkhan 2006; Khalifa 2006; Racy 2006; Catlin-Jairazbhoy 2007; Basu 2008a, b; Basu et al. 2008; Jayasuriya 2008). The first observation of African musicians in the diaspora may be by the Dutch priest, Phillipus Baldaeus, who lived in Sri Lanka from 1656 for nine years, and who wrote an extremely popular account of its customs, which was rapidly translated into English (Brohier 1960). On the 20th July 1656, Baldaeus (1672) described two 'Kaffirs' (the King's trumpeter and drummer) who brought details of the Sinhalese King's movements to the Dutch. He also mentions a 'Kaffir' trumpeter who accompanied a Portuguese free merchant. It seems likely these represent African slaves trained in European musical traditions. Nonetheless, the music of assimilated slaves remains popular in Sri Lanka up to the present with a musical form, the *kaffirinya*, which in its local form reproduces memories of African dance-songs, but which now has been parlayed into an excitable genre of pop music[8].

The broader picture is that East African slaves were being transported from as early as 0 AD to Arabia, Oman and the Gulf. They rapidly became established in the Tihama in SW Arabia and their musical culture is still very much alive today. Performances on the lyre, a characteristic musical instrument of the Horn of Africa are still to be recorded throughout this region (Bakewell 1985; Racy 2006). Exactly when the trade reached the northern coast of Arabia is less certain, but at least as early as the turn of the millennium. Olsen (2002) documents 'African' memories in Bahrain and Christensen & el-Shawan Castelo-Branco (2009) make similar observations for Oman. Further along, there are African communities in Makran, coastal Baluchistan, today's Pakistan (Badalkhan 2006). Finally, the most well-studied groups are the Siddi, Siddhi, or Sheedi (Urdu: یدیش; Gujarati: સિદ્દી), or Habshi (from the word for Ethiopia, *Habesh*), mainly in Gujarat and Hyderabad, India. The Siddi population is uncertain and current estimates range between 20–55,000. Siddis are mainly Sufi Muslims, although some are Hindus and some Roman Catholic Christians. Villages in the forests of northern Karnataka have residents who likely are descended from Mozambican/Angolan slaves who escaped from Portuguese traders and ships. Finally there are the 'Indo-African' communities who still survive in Sri Lanka today.

The other locus of former slave communities are the Indian Ocean islands, the Comoros, Réunion, Mauritius and the Seychelles. These are predominantly French colonial possessions, with the exception of the Seychelles which was first claimed by the French but later became a British colony. Two islands, Réunion and Mayotte, remain *Départements* of France, Mayottte having voted not to join the Comoros in Independence and will become an 'Outermost region' of the European Union in 2014. All these islands have complex histories, claimed, settled, exchanged between colonial powers, but also settled by Iranian traders, Malagasy and Indians. Without entering controversial politics, all have populations of predominantly African origin, which is reflected in their music (La Sèive 1984 ; Des Rosiers 1992).

The Seychelles, in particular reflects the type of chronostratigraphic layering which creates a map of its psychic geography. The types of African music associated with the earliest layer of instruments described above reflect a mixed Bantu/Austronesian culture. French popular dances of the eighteenth century still remain in fashion, such as the *contredanse*. However, some of the dances also reflect the period of English rule, including the polka and the waltz. East African coastal forms representing a mixed Afro-Shirazi culture, including *taarab*, *zouk* and *soukous* are popular. However, *sega*, originally a low-prestige form from Mauritius (and possibly before that from Mozambique) has now spread throughout the Indian Ocean islands and is now a dominant genre. Even more surprising is the *contombley*, which derives from Brazilian *candomble*, originally a music associated with the *vodun* cults on the West African coast. The list could go on, but the point should be clear. Deracinated cultures, a typical product of slavery, retain elements of their source culture, but often with transposed elements, as consequence of the bottleneck that the process of slavery represents. Individuals from a particular ethnolinguistic group are mixed together with others from quite different regions, and a characteristic language of intercommunication inevitably develops, in this case the creole languages typical of the Indian Ocean islands. Fragments of the source culture become adopted, but often with elements reinterpreted. The new culture is geographically displaced and thus not constantly

[8] Web searches now produce breathless celebrity journalism and clearly the somewhat offensive implication of the term 'Kaffir' which has led to its disappearance in South Africa has no resonance in popular Sri Lankan culture.

reinforced by contact with more traditional, long-standing practices. It thus becomes open to adopting and integrating cultural practices from all the different peoples who pass though the cultural space. This should be contrasted with India, China and SE Asia, where historical continuity can be attested from both archaeology and text analysis.

6. Conclusions

The expansion of models of exchange to include a variety of data sources can help construct a richer image of the past. Movements between SE Asia and East Africa took place in an absence of documents, but their impact was highly significant. Archaeology on Madagascar has yet to find demonstrably SE Asian ceramics, despite the evidence of language. Material culture indicates clearly something linguists have recently begun to suspect, that the migrations were complex and multi-ethnic, layered in time as well as space. The pattern formed by musical instruments shows clearly that there were significant contacts with islands such as Sulawesi as well as Borneo. The onwards transmission of instruments to islands such as the Seychelles, points to a mixed Bantu/Austronesian culture in the transitional era which has been obscured by later developments. Music cultures, even more than figurative art or religious ceremonies, give life to past cultures. They can be studied through a synthesis of scholarly disciplines which enriches our concept of prehistory.

Another aspect of a study of this type that would not easily emerge from archaeology alone is the importance of slavery in the transfer of material and social culture. The onwards distribution of all the instruments given as case studies in this paper is associated with slavery, even where the original movement reflected commercial and religious colonisation. The context of the movement of Africans to SE Asia is poorly understood, but Chinese records are fairly explicit on East African slaving. Slave cultures, by their very nature, are rarely documented, but just as in the diaspora westwards to the New World, transmit music, oral traditions, food cultures even where languages are lost.

Another aspect of Indian Ocean transfers and exchanges are its absences. Evidence for Chinese voyaging in the Indian Ocean is excellent, their knowledge of ports and sailing directions well-established, and yet their impact on musical life was minimal. No instrument of Chinese origin or any type of Chinese musical practice appears to have spread with transoceanic voyages. The explanation is presumably that their voyages very strongly focused on trade, and there was little or no cultural interaction with the places where their ships touched. This is partly in contrast with ISEA, where Chinese did form actual colonies, for example in Borneo and the Philippines, and also traded gongs throughout the region (Arsenio 2009). Even SE Asian islanders themselves, both Malays and those from other islands, left remarkably little musical trace, given that they traded in locations all around the rim of the Indian Ocean. Madagascar constitutes the one exception, where apparently a significant number of individuals, both Austronesians and Bantu-speakers, physically took possession of the island, and both brought extensive cultural baggage. The Sassanians too, despite their maritime culture flourishing over four centuries, left remarkably little trace, except for luxury traded goods (Whitehouse & Williamson 1973). The contrast is thus with the Indians, Africans and Arabs, whose musical culture was strongly embedded in the matrix of their motives for maritime travel. Wherever they landed, traces of their music remain, transformed certainly. These very different outcomes present a striking dichotomy in terms of the impact of cultural and material transfers and should be reflected beyond the strictly musical. And it seems this is the case; if religion, linguistic borrowing, subsistence technologies, dress are considered, the result would be much the same.

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